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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,318	01/04/2005	Koen Maertens	17932	2554
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CNH AMERICA LLC  
INTELLECTUAL PROPERTY LAW DEPARTMENT  
700 STATE STREET  
RACINE, WI 53404

EXAMINER

SHECHTMAN, SEAN P

ART UNIT

PAPER NUMBER

2125

MAIL DATE

DELIVERY MODE

05/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/520,318

Applicant(s)

MAERTENS ET AL.

Examiner

Sean P. Shechtman

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 10-12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 10-12, 14-16 are presented for examination. Claims 10, 12, 14, 15, 16, have been amended. Claims 1-9, 13, 17-21 have been cancelled.

#### ***Specification***

2. Objections withdrawn in light of the amendment.

#### ***Claim Objections***

3. Claim 10 is objected to because of the following informalities: Referring to claim 10, line 11, "exp(gu(t)) 1" should be "exp(gu(t)) - 1". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10-12, and 14, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 10, none of the variables of the estimation function have been defined, and therefore the claim fails to particularize the subject matter of the invention. For purposes of examination, it will be assumed that  $y'(t,g)$  is the losses of usable crop parts,  $t$  is time,  $g$  is the stochastic parameter,  $u(t)$  is the feedrate of crop into the harvesting machine, and  $\exp$  is an exponential function. Claims 11, 12, and 14 depend from claim 10 and therefore inherent the same deficiencies and assumptions.

#### ***Claim Rejections - 35 USC § 101***

5. Rejections withdrawn in light of the amendment.

***Claim Rejections - 35 USC § 102***

6. Rejections withdrawn in light of the amendment.

***Allowable Subject Matter***

7. Claim 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Neither Watt nor the prior art of record, taken either alone or in obvious combination disclose a method of operating a harvesting machine having all the claimed features of applicant's instant invention, specifically including: the step of adjusting a performance variable of the harvesting machine occurs in dependence on the output of an inverted form of a yield loss estimation function  $y'(t,g) = \exp(gu(t)) - 1$ ; wherein  $y'(t,g)$  is the losses of usable crop parts,  $t$  is time,  $g$  is the stochastic parameter,  $u(t)$  is the feedrate of crop into the harvesting machine, and  $\exp$  is an exponential function. It is for these reasons that applicant's invention defines over the prior art of record. Claims 11, 12, and 14 depend from claim 10 and are therefore also allowable.

8. Claims 15-16 are allowed.

Referring to claim 15, while Watt teaches a method of mapping one or more field lots for variations in a stochastic parameter that characterizes the instantaneously prevailing readiness with which crop is processed in a harvesting machine (Col. 17, line 66, - Col. 18, line 42), the method comprising the steps of: operating a harvesting machine to harvest crop in a field lot (See Fig. 4, element 160); measuring the machine effectiveness (Col. 25, lines 51-54) and determining the position of the machine in the field lot (Col. 11, lines 22-23); and mapping the optimized parameter value  $g'$  so as to produce a parameter map of the field lot (Fig. 4; Col. 18, lines 10-15; Col. 11, lines 15-27).

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Neither Watt nor the prior art of record, taken either alone or in obvious combination disclose a method of mapping one or more field lots for variations in a stochastic parameter  $g$  that characterizes the instantaneously prevailing readiness with which crop is processed in a harvesting machine having all the claimed features of applicant's instant invention, specifically including: simultaneously measuring a machine load and the machine effectiveness and determining the position of the machine in the field lot; storing data indicative of the position of the harvesting machine at time  $t$ ; using the measured machine load data  $u(t)$ , and machine effectiveness data  $y(t)$  in an optimization of said parameter; and mapping optimized parameter values obtained from the step of using the measured machine load data  $u(t)$  and machine effectiveness data  $y(t)$  in an optimization of said parameter; so as to produce a parameter map of the field lot. It is for these reasons that applicant's invention defines over the prior art of record. Claim 16 depends from claim 15 and is therefore also allowable.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPS

Sean P. Shechtman



May 4, 2007

5/4/07